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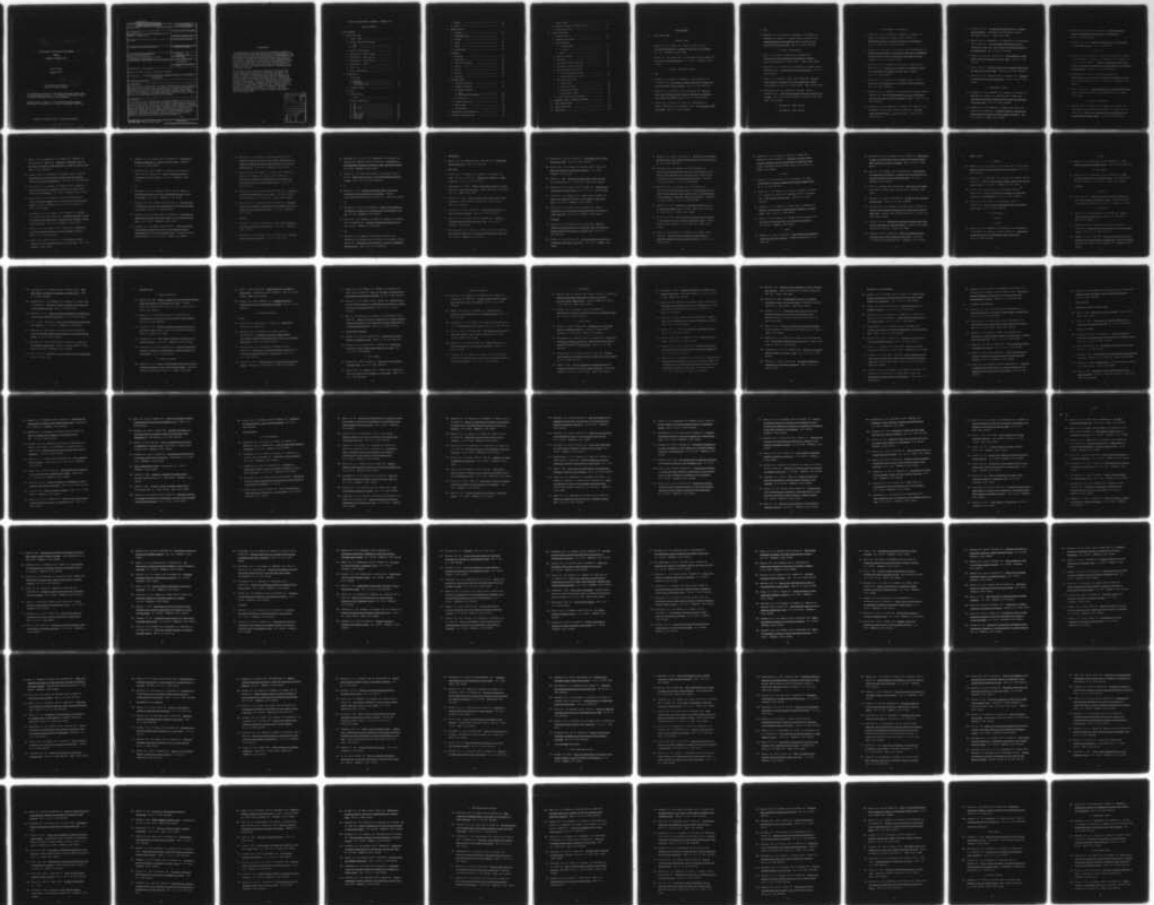
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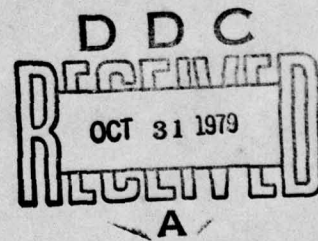
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(6) BIBLIOGRAPHY OF SOVIET LASER DEVELOPMENTS, Number 38,
~~No. 38~~
NOVEMBER — DECEMBER 1978,

Date of Report
August 6, 1979

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Vice Director for Production
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(12) 119

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4. TITLE (and Subtitle) BIBLIOGRAPHY OF SOVIET LASER DEVELOPMENTS, No. 38 NOVEMBER - DECEMBER 1978		5. TYPE OF REPORT & PERIOD COVERED
7. AUTHOR(s)		6. PERFORMING ORG. REPORT NUMBER
9. PERFORMING ORGANIZATION NAME AND ADDRESS		8. CONTRACT OR GRANT NUMBER(s)
11. CONTROLLING OFFICE NAME AND ADDRESS Defense Intelligence Agency Directorate for Scientific and Technical Intelligence, ATTN: DT-1A		10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS
14. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office)		12. REPORT DATE August 6, 1979
		13. NUMBER OF PAGES 111
		15. SECURITY CLASS. (of this report) UNCLASSIFIED
		15a. DECLASSIFICATION/DOWNGRADING SCHEDULE
16. DISTRIBUTION STATEMENT (of this Report) Approved for public release; distribution unlimited		
17. Distribution Statement (of the abstract entered in Block 20, if different from report)		
18. Supplementary Notes		
19. KEY WORDS Solid State Lasers, Liquid Lasers, Gas Lasers, Chemical Lasers, Laser Components, Nonlinear Optics, Spectroscopy of Laser Materials, Ultrashort Pulse Generation, Gamma Lasers, Laser Theory, Laser Biological Effects, Laser Communications, Laser Beam Propagation, Laser Computer Technology, Holography, Laser Chemical Effects, Laser Parameters, Laser Measurement Applications, Laser-Excited Optical Effects, Laser Beam-Target Interaction, Laser Plasma		
20. ABSTRACT This is the Soviet Laser Bibliography for November-December 1978 and is no. 38 in a continuing series on Soviet laser developments. The coverage includes basic research on solid state, liquid, gas, and chemical lasers; components; nonlinear optics; spectroscopy of laser materials; ultrashort pulse generation; theoretical aspects of advanced lasers; and general laser theory. Laser applications are listed under biological effects; communications; beam propagation; computer technology; holography; laser-induced chemical reactions; measurement of laser parameters; laser measurement applications; laser-excited optical effects; beam-target interaction; and plasma generation and diagnostics.		

Introduction

This bibliography has been compiled under an interagency agreement as a continuing effort to document current Soviet-bloc developments in the quantum electronics field. The period covered is November-December 1978, and includes all significant laser-related articles received by us in that interval. The bulk of the entries come from the approximately 30 periodicals which are known to publish the most significant findings in Soviet laser technology. Citations from the Russian Reference Journals are included, as well as entries from the CIRC data base not otherwise covered. Laser items from the popular or semipopular press are generally omitted.

For convenience we have abbreviated frequently cited source names; a source abbreviations list and an author index are included. All sources cited with no parenthetical notation are available at the Library of Congress. A parenthetical entry (RZh, KL) indicates the secondary source in which the citation was found as a bibliographic entry or abstract, but for which the original source is not currently available at the Library. The authors' affiliations are indicated by the numbers in parentheses following the authors' names in the text and are listed in the Author Affiliations List. New affiliations are assigned a new number and are added to a cumulative list which includes all affiliations from 1969 to the present. Only those affiliations which appear in this issue are listed in this issue's Author Affiliations List.

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SOVIET LASER BIBLIOGRAPHY, NOVEMBER - DECEMBER 1978

TABLE OF CONTENTS

I. BASIC RESEARCH

A. Solid State Lasers

1. Crystal: Ruby	1
2. Crystal: Rare-Earth Activated	
a. Nd ³⁺	1
b. Er ³⁺	2
3. Crystal: Miscellaneous	2
4. Semiconductor: Simple Junction	---
5. Semiconductor: Mixed Junction	---
6. Semiconductor: Heterojunction	3
7. Semiconductor: Theory	4
8. Glass: Nd	5
9. Glass: Miscellaneous	5

B. Liquid Lasers

1. Organic Dyes	
a. Rhodamine	6
b. Phthalimide	6
c. Miscellaneous Dyes	6
2. Inorganic Liquids	---

C. Gas Lasers

1. Simple Mixtures	
a. He-Ne	7
2. Molecular Beam and Ion	
a. CO ₂	8
b. CO	10
c. Noble Gas	11
d. H ₂	12
e. N ₂	12
f. CF ₄	12
g. Submillimeter	13
h. Metal Vapor	13
i. Gasdynamic	14

3. Excimer	16
4. Theory	16
D. Chemical Lasers	
1. $F_2+H_2(D_2)$	18
2. Photodissociative	---
3. Transfer	---
4. $ClF+H_2$	18
5. NF_2+H_2	19
6. Miscellaneous	19
E. Components	
1. Resonators	19
2. Pump Sources	19
3. Diffraction Gratings	20
4. Filters	20
5. Mirrors	20
6. Detectors	21
7. Modulators	22
F. Nonlinear Optics	
1. Frequency Conversion	24
2. Parametric Processes	24
3. Stimulated Scattering	
a. Raman	25
b. Miscellaneous Scattering	26
4. Self-focusing	26
5. Acoustic Interaction	27
6. Birefringence	28
7. General Theory	28
G. Spectroscopy of Laser Materials	31
H. Ultrashort Pulse Generation	32

J. Crystal Growing	---
K. Theoretical Aspects of Advanced Lasers	33
L. General Laser Theory	33
II. LASER APPLICATIONS	
A. Biological Effects	35
B. Communications Systems	35
C. Beam Propagation	
1. In the Atmosphere	39
2. In Liquids	---
3. Theory	49
D. Computer Technology	50
E. Holography	53
F. Laser-Induced Chemical Reactions	64
G. Measurement of Laser Parameters	66
H. Laser Measurement Applications	
1. Direct Measurement by Laser	70
2. Laser-Excited Optical Effects	83
J. Beam-Target Interaction	
1. Metal Targets	88
2. Dielectric Targets	88
3. Semiconductor Targets	89
4. Miscellaneous Studies	89
K. Plasma Generation and Diagnostics	91
III. MONOGRAPHS, BOOKS, CONFERENCE PROCEEDINGS	94
IV. SOURCE ABBREVIATIONS	97
V. AUTHOR AFFILIATIONS	100
VI. AUTHOR INDEX	103

I. BASIC RESEARCH

A. SOLID STATE LASERS

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IV. SOURCE ABBREVIATIONS

(CIRC Codens)

BAPS	(BAPTA)	Bulletin de l'Academie Polonaise des Sciences. Serie des Sciences Techniques
DAN B	(DBLRA)	Akademiya nauk Belorusskoy SSR. Doklady
DAN SSSR	(DANKA)	Akademiya nauk SSSR. Doklady
DAN Ukr	(DUKAB)	Akademiya nauk Ukrayins'koyi RSR. Dopovidi. Seriya A. Fizyko-matematychni ta tekhnichni nauky
FA10	(IFAOA)	Akademiya nauk SSSR. Izvestiya. Fizika atmosfery i okeana
FiKhOM	(FKOMA)	Fizika i khimiya obrabotka materialov
FTP	(FTPPA)	Fizika i tekhnika poluprovodnikov
FTT	(FTVTA)	Fizika tverdogo tela
IAN Arm	(IAAFA)	Akademiya nauk Armyanskoy SSR. Izvestiya. Fizika
IAN B	(VABFA)	Akademiya nauk Belorusskoy SSR. Izvestiya. Seriya fiziko-matematicheskikh nauk
IAN Fiz	(IANFA)	Akademiya nauk SSSR. Izvestiya. Seriya fizicheskaya
IT	(IZTEA)	Izmeritel'naya tekhnika
IVUZ Fiz	(IVUFA)	Izvestiya vysshikh uchebnykh zavedeniy. Fizika
IVUZ Priboro	(IVUBA)	Izvestiya vysshikh uchebnykh zavedeniy. Priborostroyeniye
IVUZ Radioelektr (IVUZB)		Izvestiya vysshikh uchebnykh zavedeniy. Radioelektronika
IVUZ Radiofiz	(IVYRA)	Izvestiya vysshikh uchebnykh zavedeniy. Radiofizika
KE	(KVEKA)	Kvantovaya elektronika
KL	(KNLTA)	Knizhnaya letopis'
KLDV	(KLDVA)	Knizhnaya letopis'. Dopolnitel'nyy vypusk
KSpF	(KRSFA)	Kratkiye soobshcheniya po fizike
NM	(IVNMA)	Akademiya nauk SSSR. Izvestiya. Neorganicheskiye materialy
Os	(OPSPA)	Optika i spektroskopiya
OMP	(OPMPA)	Optiko-mekhanicheskaya promyshlennost'

PTE	(PRTEA)	Pribory i tekhnika eksperimenta
RiE	(RAELA)	Radiotekhnika i elektronika
RZhF	(RZFZA)	Referativnyy zhurnal. Fizika
RZhGeofiz	(GZGFA)	Referativnyy zhurnal. Geofizika
RZhMekh	(RZMKA)	Referativnyy zhurnal. Mekhanika
RZhMetrolog	(RZMIB)	Referativnyy zhurnal. Metrologiya i izmeritel'naya tekhnika
RZhRadiot	(RZRAB)	Referativnyy zhurnal. Radiotekhnika
Sb1	Sbornik	Vsesoyuznaya konferentsiya po golografii. 3rd. Ul'yanovsk, 1978. Tezisy dokladov. Leningrad, 1978.
Sb2		Lyuminestsentsiya i tochechnyye defekty v kristallakh. Irkutsk, 1978.
Sb3		Izmeritel'nyye pribory dlya issledovaniya parametrov prizemnykh sloev atmosfery. Tomsk, 1977.
Sb4		Vsesoyuznyy seminar po fizicheskim protsessam v gazovykh OKG. 2nd. Uzhgorod, 1978. Tezisy dokladov. Uzhgorod, 1978.
Sb5		Vsesoyuznyy simpozium po sil'notochnoy impul'snoy elektronike. 3rd. 1978. Tezisy dokladov. Tomsk, 1978.
Sb6		Nekotoryye problemy teplo- i massoobmena. Minsk, 1978.
Sb7		Impul'snaya fotometriya, no. 5, 1978.
Sb8		Dielektricheskiye materialy radioelektroniki. Moskva, 1977.
Sb9		Issledovaniya v oblasti spektroskopii i kvantovoy elektroniki. Vil'nyus, 1978.
Sb10		International Conference on Phenomena in Ionized Gases. 13th. Proceedings. Berlin, 1977.
Sb11		Vsesoyuznaya konferentsiya po rasprostraneniyu radiovoln. 12th. Tomsk, 1978. Part 2. Tezisy dokladov. Moskva, 1978.
Sb12		Vsesoyuznyy simpozium po lazernomu i akusticheskomu zondirovaniyu atmosfery. 5th. Part 2. Tezisy dokladov. Tomsk, 1978.
Sb13		Atmosfernyye aerosoli i atmosfernoye elektrichestvo. Kirov, 1977.
Sb14		Segneto-i p'yezomaterialy i ikh primeneniye. Moskva, 1978.

Sb15		Detonatsiya. Kriticheskiye yavleniya. Fiziko-khimicheskiye prevrashcheniya v udarnykh volnakh. Chernogolovka, 1978.
Sb16		Vsesoyuznaya konferentsiya po rasprostraneniyu radiovoln. 12th. Tomsk, 1978. Part 1. Tezisy dokladov. Moskva, 1978.
Sb17		Metody lazernoy dopplerovskoy diagnostiki v gidroaerodinamiki. Minsk, 1978.
Sb18		Poluprovodnikovyye pribory i elektronnaya apparatura. Voprosy elektroniki. Kishinev, 1978.
Sb19		Rasseyaniye i pogloshcheniye sveta malymi sfericheskimi chastitsami. Krasnoyarsk, 1978.
Sb20		Polucheniye i svoystva tonkikh plenok, no. 5, Kiyev, 1978.
Tr	Trudy	Moskovskiy energeticheskiy institut. Trudy, no. 350, 1978.
Tr2		Trudy uchebnykh institutov svyazi. Seti i kanaly svyazi i raspredeleniye informatsii. Leningrad, 1978.
Tr3		Institut eksperimental'noy meteorologii. Trudy, no. 4(83), 1978.
Tr4		Institut eksperimental'noy meteorologii. Trudy, no. 21(80), 1978.
Tr5		Institut geofiziki AN GruzSSR. Trudy, no. 4, 1978
Tr6		Institut kibernetiki AN GruzSSR. Trudy, no. 3, 1978.
Tr7		Tashkentskiy universitet. Sbornik nauchnykh trudov, no. 550, 1978.
Tr8		Institut teoreticheskoy astronomii AN SSSR. Trudy, no. 17, 1978.
Tr9		Institut fiziki AN BSSR. Preprint, no. 144, 1978.
Tr10		NI i proyektyny institut redkometallicheskoy promyshlennosti. Nauchnyye trudy, no. 86, 1977.
TVT	(TVTYA)	Teplofizika vysokikh temperatur
UFN	(UFNAA)	Uspekhi fizicheskikh nauk
UFZh	(UFIZA)	Ukrainskiy fizicheskii zhurnal
ZhETF	(ZEIFA)	Zhurnal eksperimental'noy i teoreticheskoy fiziki
ZhETF P	(ZFPA)	Pis'ma v Zhurnal eksperimental'noy i teoreticheskoy fiziki
ZhNIPFIK	(ZNPFA)	Zhurnal nauchnoy i prikladnoy fotografii i kinematografii
ZhPMTF	(ZPMFA)	Zhurnal prikladnoy mekhaniki i tekhnicheskoy fiziki
ZhPS	(ZPSBA)	Zhurnal prikladnoy spektroskopii
ZhTF	(ZTEFA)	Zhurnal tekhnicheskoy fiziki
ZhTF P	(PZTFD)	Pis'ma v Zhurnal tekhnicheskoy fiziki

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16. Moscow Engineering Physics Institute (Moskovskiy inzhenerno-fizicheskiy institut).
19. Moscow Power Engineering Institute (Moskovskiy energeticheskiy institut).
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CHAYKOVSKIY M F	42, 43	DERKACHEV L D	32	DZHUGELI B P	55	G	74
CHEBOTAREV N F	64	DERZHAVIN S I	36, 37, 53	E		GAERTNER W	55
CHEBOTAYEV V P	54	DERZHITSKOVA V I	72	EBERT W	17	GAFUROVA N S	92
CHEBRYAK M S	38	DEVYATKOVA L I	31	ESSEL' BAKH P B	31, 93	GAGOV V	12
CHEKAN A V	87, 88	DEVYATYKH G G	35, 37			GALECHYAN G A	92
CHEPUR D V	53	DEYEV A YE	40, 47	F		GAMALIY YE G	86
CHEREMISKIN I V	47	DIANOV YE M	35, 36, 37			GAMARTS YE M	74
CHEREPANOV V N	61	DIANOV-KLUKOV V I	40			GAN M A	51
CHEKASOV YU A	84	DIANOVA V A	20			GANZHERLI N M	56
CHEKASOVA YU V	78	DIAZ D	35			GARIBASHVILI K A	56
CHEKUNOVA G P	37	DIKOVICH S V	20			GAVRILOV G A	74
CHEKUNOV P V	31, 93	DIMITROV G	92			GAVRONSKAYA YE A	28
CHEKUNOV S P	68, 70	DIMITROVSKA S	72, 73			GAVRYUSHIN V I	64
CHEKUNOVSKY A A	82	DMITRIYEV A YE	25			GAYSKIY N V	51
CHEKUNOV V T	85	DMITRIYEV V G	1, 2, 32			GAYSLEER V A	28, 85
CHEKUNOV YE N	89	DMITRIYEV V N	85			GENKIN V N	53
CHISTYAKOVA L K	28	DMITRIYEV S L	10, 11			GENKINA N A	86
CHMEL A	29	DOLGINOV L M	55			GEDGITSE YE I	94
CHMELA P	8, 92	DOLININA V I	55			GERASIMOV S M	74
CHROSTOWSKI J	91	DOMBROVSKIY S A	73			GERSENZON YU M	89
CHUGUNOV A YU	58	DOMBROVSKIY V A	84			GERTOVICH T S	51
CHURAKOV A N	3	DORFMAN A G	71			GIBIN I S	38
CHURAKOV A V	9, 10, 17	DOROKHINA V V	67			GINZBURG S A	94
CHURAKOVA V M	57	DORONIN A V	1			GINZBURG V M	75
CHURAKOV V V	83	DOSONIN G S	29			GLAZOV G N	21
CHURAYEV A L	51	DOSONIN I	88			GLIBERMAN A YA	90
CHUVAYEVA T I	73	DOYGER L S	74			GLUSHAK B L	71
CRISTESCU C P	73	DRAHOVICH K N	67			GLUSHKOV M V	20, 22, 23, 67
CSOHOI R	85	DRAGANESCU V	81			GNATOVSKIY A V	40, 42, 49, 75
	36	DROENIK A	28			GOL'DFARB I S	36
	8, 27, 91, 92	DROZDOV M M	55, 56			GOLGER A L	13
DANEIYUS R	73	DROZHBIN YU A	17			GOLUBENKO I V	61
DANILEYKO M V	85	DUBNISHCHEV YU N	27			GOLUBEV V N	75
DANILEV S V	1	DUBOVIK A N	42			GONCHARENKO V P	88
DANILOV V A	36	DUBOVIK M F	13			GONCHAROV I G	4
DANILYCHEV V A	73	DUDENKOVA A V	90			GONCHUKOV S A	75
DATSKEVICH N P	29	DUDOROV N S	42			GORDIYETS B F	17
DAVARASHVILI O I	4	DUKHOPED I I	33			GORELENOK A T	3
DAVYDOV S V	7	DUKHOVNIY A M	55, 56			GORELENOK A G	35
DAVYDOV V T	73	DUMITRAS D C	17			GORINA YU I	71
DEBLOVSKIY M M	73	DUTOV A I	27			GOROBETS A P	36
DEBUSHENKO K B	4	DUVORIN B I	90			GORODETSKIY V S	27
DELONE N B	29	DVORSKIY S V	42			GOROKHOV YE YU	70
DEMIA A	63	D-YACHKOV L G	13			GOROKHOV YU A	9
DEMIA A I	16	DYATEL V P	90			GORSHUNOV N M	8
DENCHEVA M G	24	DYATLOV K N	42			GRACHEV A P	4
DENISOV A N	1	DYNASHITS B M	11			GRACHEVA N M	21
DENISYUK YU N	55, 94	DZHAFAROVA E A	89				
DERKACH V YE	85	DZHOTYAN G P	24, 25				

MARULIYA L K	50	MILVIDSKIY M G	3	MIL'NIKOV V S	88	QRINTSOV V I	26
MARAKOV N L	20, 95	MILYAVSKIY YU S	5	N		QDISHARIYA M A	45
MANEK B	2	MINAYEV S V	81	NAATS I E	44, 47	QDULOV S G	57, 60
MANESHIN N K	20	MIN'KO L YA	17	NADEYKIN A A	76	OGANESYAN A V	43
MANZON B M	89	MIRINDYAYOV M M	69	NADEZHINSKIY A I	71	OKHOTNIKOVA O G	3
MARCHEVSKIY F N	24	MIRONENKO V R	78	NADTOCHENKO V A	85	ORAYEVSKIY A N	8, 11, 16
MARDENOV M P	91	MIRONOV A V	78	NADTOCHENKO N G	85		18, 19
MAREK Z	59	MIRONOV I F	86	NALBANDYAN A B	54, 60		18
MARGVELASHVILI I I	50	MIRONOV O N	71	NALIMOV I P	74		69
MARICHEV V N	44	MIRUSHNICHENKO G P	64	NALIMOV A S	60	ORYSHEV I N	1
MARIS Z	88	MIROVITSKIY D I	78	NASIROV U	76	OSADCHYI V M	42, 43
MARKOV S YE	94	MIRZABEKOV A M	78	NASYROV U	30	OSIPOV V M	41
MARKOV V B	57	MIRZABEKOV P A	92	NAUGOL'NIKH K A	27	OSTROVSKAYA L YA	11
MARKOVA S N	50	MISHAKOV V G	14	NAUGOL'NIKH K A	92	OSTROVSKIY YU I	78
MARTSYNK'YAN V L	12	MISHIN V I	84	NAUMOV S P	79	OTMAKHOV I I	21
MASALOV A V	29, 70	MISTA L	25	NAVITYEV S H	12	OYCHINNIKOV B V	35
MASALOV YE V	40	MITROFANOV A S	95	NAYMARK S I	51	OVECHKINA T G	61, 62
MASARNOVSKIY L V	7	MITROFANOV V V	23	NAZAROV B I	6	OVECHKIS YU N	60
MASHINSKIY A L	44	MITSEL' A A	44	NEBOL'SIN M F	69	OVSYANNIKOV V D	29
MASHINSKIY V M	36	MIZRUKHIN L V	59	NECHAYEV S V	92	OVSYANNIKOVA N V	81
MASHLYANKIN V I	93	MOCHALOV I V	31	NEEF E	38	OZOLS A O	62
MATCZAK M J	28	MOKHUN' I I	52	NEGIN A YE	91		
MATIYENKO B G	52	MOLCHANOV M I	7	NEKRASOV G L	58	PACHEVA Y KH	21
MATSONASHVILI B N	4	MOLCHANOV V YA	27	NEMISEV I Z	93	PAK G T	3
MATVEYENKO YE V	3	MOLIN YU N	66	NERSISYAN G TS	19	PAK I	78
MATVEYETS YU A	33, 87	MOLODTSOV S N	38	NESHCHINENKO YU P	8	PAL' A F	12
MATVEYEV O I	84	MOLODYK A M	21	NESTERIKHIN YU YE	52, 96	PANAKHOV M M	57
MATYUSHKIN E V	85	MONGON B S	30	NEZHEVENKO YE S	73	PANCHENKO M V	48
MAURER I A	51	MORGUN YU F	1	NGOK CHAN	1	PANCHENKO V YA	17
MAYDOROV V S	65, 90	MOROZ E V	94	NIKIFOROV S M	91	PANFILD V N	77, 85
MAYDANI V N	3	MOROZENKO YA V	86	NIKIFOROVA N K	79	PANULOVSKIY V F	31
MEDVEDEV B A	20, 22, 67	MOROZOV A O	82	NIKITIN A I	76	PAPANYAN V O	19
MEDVEDEV N V	25	MOROZOV V N	59	NIKITIN YE P	37	PAPERNYI S B	26
MELEKH R T	88	MORSKOV V F	44	NIKOGOSYAN D N	33, 87	PARFIANDVICH I A	2
MEL'NIKOV L A	66	MOSTOVNIKOV V A	19	NIKOLAYEV L V	42	PASHCHENKO G S	25
MENENKOV V D	13	MOTKIN V S	12	NIKOLAYEV M V	22, 67	PASHCHENKO G S	84
MERZLYAKOV N S	57	MOVSHEV V G	32	NIKOLAYEV S N	52	PASHKO S A	4
MESYATS G A	16	MOZHAROVSKIY A M	84	NIKOLAYEV V B	17	PASKHIN YE D	79
MIFTAKHOV M KH	40, 47	MUARSHOVA V A	38	NITSOLOV S L	30	PASMANIK G A	26
MIKABERIDZE A A	59	MUELLER R	78	NOVIKOV S A	90	PATRUSHEV G YA	45
MIKAELIAN A L	31	MUKHAMEDYAROV R D	53, 56, 59	NOVIKOV S S	15, 41	PAVLICHENKO O S	93
MIKHAYLIN V V	23	MUMLADE V V	36, 38	NOVODSELETS M K	60	PAVLIK B D	94
MIKHAYLOV S I	25	MURADYAN A G	1	NOWICKI M	95	PAVLOV A B	85
MIKHAYLOV YU A	23	MURAVITSKIY M A	95			PAVLOV L Y	87
MIKHAYLOV YU N	5	MURAVITSKIY V P	52, 59			PAVLOV V I	79
MIKHAYLOVA V I	63	MUSTAFIN K S	26			PAVLOV YU D	79
MIKHAYLOV V I	85	MUSTAFINA L T	20			PAVLOVA L N	50, 79
MIKHAYLOV V P	55	MUSTAYEV K SH				PAVLYUK A A	2
MIKHEYEVA V P	85	MUSTEL' YE R					
MIKOLOV I D							
MILLER A M							

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POHELIN YU V A	37	KAPLOFF W A	80	RYCHECHKIN S A	18
PELEKHATYI V A	78	KAPLOFF W A	77	RYL'KOV V V	12
PEL'TSMAN S S	54, 58	RAGUL'SKIY K M	52	RYKIN B S	35
PEN YE F	22	RAGUL'SKIY V V	30	RYKIN S M	22
PENZINA E E	14	RAKHIMOV A T	9, 10	RYZHKOVA A I	2
PEREL'MAN N F	9, 12	RAKHIMOV A T	56	RYZHOV V V	16
PERIN J	31	RAPOPORT L P	95		
PERKUSOROV S A	93	RASSOKHA A A	56		
PERNER B	43, 44	RAUTIAN S G	34		
PERSANTSEV I G	83	RAYEVSKIY I M	89	SADYKOVA A I	59
PERSONOV R I	9	RAYKH M E	35	SAFRONOV A N	63
PESHKO I I	30	RAZDOBARIN G T	92	SAFRONOV YU P	96
PETRAKIEV A	79	RAZVIN YU V	58	SATCHEV A I	38
PETRASH G G	3, 4, 59	REBRIN YU K	94	SALIN B M	75
PETROV A K	22, 23	REBROV A K	64	SALIY V I	16
PETROV G D	48	RED'KINA N I	42	SALMANOV V M	89
PETROV K N	35	REKSNIS YU Y	82	SAL'NIKOV I M	48
PETROV M P	20	REKETA YE YU	13	SALOMATOV V N	2
PETROV N KH	14	RENTSCH M	17	SAHARTSEV V V	80
PETROV S V	88	RESCHKE E	80	SAMOKHVALOV I V	90
PETROV YU N	21	RESHETOV V I	76	SAMOKHVALOV I V	39, 45, 49
PETROVA L A	61	REZNIKOV YU A	59	SANSON A M	80
PETROVSKAYA T S	60	RICHTER A	51	SARKISOV O M	65
PETROVSKIY V N	5, 35, 36, 37	RINKEVICH YUS B S	33	SARTAKOV B G	34
PEIRU F	65, 91	RIVLIN L A	21	SATSUNKEVICH V D	12, 64
PETRUNKIN V YU	54	ROGALEV V M	82	SATTAROV F A	72
PETUSKIN A M	3	ROGOZ S A	88	SATTIKULOV M	27
PETUKH M L	72, 79	ROMANENKO A V	45	SAVICHEV A T	91
PETUKHOV V O	9	ROMANOV N N	57	SAVITSKIY G M	61
PETUKHOV V A	32	ROMANOV YU F	58	SAVRANSKIY S M	50
PEVGOV V G	11	ROMANOV L I	85	SAVENKO V A	90
PIKUZ S A	92	ROMANOVSKIY YU V	68	SCHLAGE R	2
PILIPOVICH V A	52, 54, 61	ROMASHKOV A P	55	SCHRAMM W	17
PINCHUK S D	39, 45	ROVINSKAYA YU I	26	SCHUBERT D	75
PIROZHKOVA V A	30	ROZANOV N N	74	SCHULTZE D	2
PISKARSKAS A	1	ROZENSHTAYN V B	49	SEDOV B M	1, 6
PISKUNOVA L V	26	ROZHESTVENSKIY A YE	5	SEL'DOVICH B YA	30
PIS'HENNY V D	9	ROZMAN S P	73	SELEZNEVA L A	13
PIVINSKIY YE G	6	ROZNIKOVSKI K	20	SEMAK D G	88
PKHALAGOV YU A	48	RUBANOV A S	42	SEMENTOV E G	94
PLATONENKO V T	65	RUBIN SH A	32, 65	SEMENTOV P M	63
PLATONOV A	44	RUBINOV A N	76	SEMENTOV V V	92
PLESHAKOVA R P	84	RUDENKOVA V A	75	SEMENTOV V YE	9
PLONSKIY A F	95	RUKMAN G I	63	SEMKIN B V	8
PLOTNIKOV A F	22	RUMYANTSEV V A	61	SENYACHKIN B YE	64
PLYATSKO G V	89	RUSEV I R	84	SENOKOSOV E A	4
PLYUKHIN A G	86	RYAKOV YE V	55, 61	SEREBRYAKOV V A	26
PLYUSHIN I I	45	RYAEDOVA R V	5	SERGEYEV P A	61
POEHLER M	89	RYBA-ROMANOWSKI W	37	SEROV O B	62
POGODAYEV V A	49	RYBALTOVSKIY A O			
		RACHEK V F	76		

SEROV R V	78	SHUL'GA A M	85	SOKOLOVSKIY R I	33	SUKHOV YE G	3
SHABANOV V F	80	SHUL'GIN B V	78	SOLDATOV A N	7, 14, 44	SULAKSHINA O N	47
SHAKIR YU A	8	SHUL'MAN S G	27	SOLDAKOV V A	15	SUMINOV V M	81
SHALAYEV YE A	1	SHUL'PIN A A	83	SOLOKHAN A F	31	SUROV O I	91
SHAMAYEV V S	45	SHUMILOV E N	50	SOLDUKHIN R I	14, 15, 31	SUROVEGIN A L	29
SHANIN V I	77	SHUYKIN N N	44	SOLOV'YEV K N	85	SUSLINA L G	86
SHANSKIY V F	67	SHVARTS K K	62	SOLOV'YEV V F	51	SUYAZOV N V	69
SHAPIRO I TA	40, 46, 59	SIBEL'DIN N N	86	SOLOV'YEV V YE	4	SUYANOV S KH	83
SHAPOV V S	77	SIDORENKO I B	22	SOLOV'YEV G I	11	SUYANOV V KH	63
SHARAYKO A A	46	SIDOROV V V	44	SOLYMAP L	62	SVERDLOV L M	87
SHARIKOV A KH	60	SIDOROVICH V G	56, 62, 63	SOM E YE	10	SVESHNIKOVA YE B	79
SHARKOV A V	33, 87	SILICHEV O O	32	SOSKIN YU M	47	SVETLICHNYY I B	15
SHARKOV V F	11	SILIN V P	91	SOSKIN M S	57, 59	SVIRIDOV V A	90
SHARONOV G A	75	SIL'VESTROV V G	28	SOSNIN A V	44, 45, 49	SVIRIDOV V V	54, 58
SHATALIN I D	53	SIMONOV A P	20	SOSNOVSKIY S A	4	SVIRIDOVA R K	31
SHATROV V B	76	SIMONOV B M	20	SOTIN V YE	53	SVIRKUNOV P N	39
SHCHERBININA V N	85	SINCHENKO V G	61	SOUSTOV L V	85	SYDYKOV A	50
SHEBEKO YU N	11	SINITSA L N	49	SPIRIDONOV V A	5	SYREYSHCHIKOVA T I	84
SHEDOVA YE N	78	SINITSYN G V	24, 51, 76	SPIRIDONOV V P	80	SYROYEZHKO T A	31
SHELEMIN YE B	75	SINTSOV V N	61, 77	STARINIS A	1	SYTS'KO YU I	16
SHEMETOV V V	50	SIZOV N I	40	STARMIKOV I V	80	SYUTKIN V M	46
SHEMYAKINA S B	16	SKACHEK G V	12	STARMIK B	38	SZURANSKI W	73
SHEPELEV A V	31	SKLIZKOV G V	23, 91	STARNEVA T G	6		
SHEVANDINA T N	22	SKOBELKIN V I	20	STARIKOV A D	6		
SHEVANDIN V S	31	SKORUN S D	4	STAROSTIN A N	12		
SHEVCHENKO YU B	65	SKRIPKIN A M	39, 47	STARUKHIN A N	86	TAGIROV V I	89
SHEVERA V S	16	SKRYBIN B G	34	STARUKHIN A S	85	TALANOV V I	26
SHIKANOV A S	91	SLIVKA V YU	87	STASEL'KO D I	50, 56, 57	TAL'ROZE V L	18
SHIKANOV A YE	84	SMIL'GYAVICHYUS V	1, 67	STAUPENDIHL G	69	TARASENKO N V	24
SHIKIN A M	22	SMIL'GYAVICHYUS V	32	STAVROV A A	72, 93	TARASENKO V F	16
SHIMAROV A I	77	SMIRNOV A G	73, 74	STEFANOVICH S YU	30, 32	TARASOV I S	3
SHIPULO G P	36	SMIRNOV I A	27	STEFANOV B I	9, 10, 17, 34	TARKHIN D V	83
SHITOV V G	54	SMIRNOV V A	26	STEFANOV K G	3, 21, 68, 75, 94	TELEGINA T P	69
SHITOV V V	37	SMIRNOV V G	67, 73	STEFANOV S I	39	TEPLOVA R K	57
SHITOVA E V	53	SMIRNOV V L	20, 36	STEFANOV V M	58, 60	TEREKHOV A S	51
SHKUNOV V V	64, 70	SMIRNOV V V	62	STEFANOV V M	40, 47	TERESHKOV V P	69, 70
SHLITERIS E P	13	SMIRNOV YU M	11	STOLKOVA O V	86	TERICHEV V F	37
SHMAL'KO A V	20, 36	SMOLIN O V	67	STOLYAROV O I	12	TER-MIKAEVLYAN M L	34
SHMATIN S G	52	SMOLINSKI A	38	STOFACHINSKIY V B	86	TEUMIN I I	96
SHOKIN YU V	37	SMOLOVICH A M	62	STOZHAROVA K A	62	TIRILOV V K	3
SHOTOV A P	4	SNYKOV V P	79	SIRELETS L I	80	TIKHOMIROV A A	39
SHAPAK M T	7, 22, 67, 85	SOREIKH M A	89	STROKOVSKIY V L	2, 24, 87	TIKHOMIROV G P	88
SHUAIBOV A K	16	SOROL' A A	1	STUPAK A P	78, 80	TIKHOMIROV S V	68, 70
SHUBIN L YE	84	SOROLEV A G	86	SURATINOV N V	32, 65	TIKHONCHUK T V	91
SHUBIN V E	22	SOROLEV G A	61, 62	SUCHKOV A F	21	TIKHONOV YE A	7
SHUGAYEV V I	52	SOROLEV N N	11, 16	SUCHKOV V A	10	TIMOFEEV A A	67
SHUKHTIN A M	14	SOROLEV V A	8	SUCHKOV V I	6, 17	TIMOFEEV I B	91
SHUKLIN V S	45	SOKHOR V	46	SUKHANOV V I	53	TIMOFEEV M A	9, 12
SHULAKOV V A	76	SOKOLOV A V	41, 48	SUKHANOV YE P	62	TIMOFEEV V D	25
SHUL'GA A M	66	SOKOLOVA L V	92	SUKHORUKOV A P	29, 50, 90	TIMOSHCHENKIN A I	1

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TISHCHENKO V G	7	USIKOV A S	3	VLASOV D V	70	YASHIN V YE	26
TITOV A A	81	USIN V A	72	VLASOV S N	26	YASHKIR YU N	87
TKACH YU V	12	UTKIN G I	81	VLASOV V I	88	YASHNOV YU F	79
TOLCHIN V G	52	UTYANYSHEV R I	35	VODOVATOV I A	82	YASTREB N N	94
TOLKACHEV V A	20	UZHEGOV V N	48	VOIGT J	31	YASTREMSKIY A G	16
TOLSTOROGZHEV G B	32	UZSOKI F	81	VOKHMN P A	13	YATSENKO V A	82
TOMASHOV V N	18	V		VOLKOV A A	14	YATSKEVEV YU F	45
TOMULESCU R	88			VOLKOV V I	94	YEFIMOV V F	26
TOPOROV V V	25			VOLKOV V I	72,84	YEFIMOV V M	96
TORGOVICHEV V A	46	VAGIN L N	63	VOLOSEVICH P P	93	YEFIMOVSKIY S V	9
TOROPOV A K	66	VAGIN S P	15	VOLOSHCHENKO YU I	53	YEFREMEKO V V	40
TOSHEV E T	8	VALIS A S	52	VOROB'YEV V V	43	YEFREMEKO V A	31
TOVSTYUK K D	89	VARDANYAN A S	41	VOROB'YEV V V	50	YEFREMOVA L D	53
TRACHUK V S	67	VARDOSANIDZE Z V	59	VORZHOVA N D	53	YEGEREV S V	27
TREKHOV YE S	44	VARGA P	51	VOSTRIKOV A A	63	YEGOROV A L	48
TRENEVA B G	12	VARLATAYA S K	22	VOYTSEKHOVSKAYA O K	64	YELAYEV V F	14
TRENEVA YE G	9	VASILENKO YU G	81	VUL'FSON YE K	47	YELISEYEV P G	3,5
TRET'YAKOV G K	41	VASILEVSKIY K P	41	VUS M A	26	YELISTRATOV V A	69
TRIEBEL W	65,75	VASIL'YEV G K	18	VYBORNOV V I	90	YELYUKHIN V A	35
TROFIMOV A N	14	VASIL'YEV I A	83	VYBORNOV V I	12	YENEVTSEV YU N	32
TRUITSKIY I N	63	VASIL'YEV V S	81	VYSOCHANSKIY YU M	84	YERKO A I	44
TROPCHENKO A YU	57	VASIL'YEV V V	21	VYSOCHANSKIY YU M	87	YEROKHIN A V	40
TRUNOV V K	31	VASIL'YEV YE V	31	VYSOCHANSKIY YU M	82	YEROKHOVETS V K	53
TRUSHIN S A	9,10,17	VASIL'YEVA A V	10	W		YERON'KO S B	89
TSARAN V H	4	VASIL'YEVA M A	70	WALIGORA C	2	YEROKHIN A V	63
TSARIN V YA	94	VAULIN P P	39,47	WEIDAUER R	17,19	YEROKHIN A V	5
TSENTER M YA	83	VAYTKUS YU	28	WILHELM R	65,75	YEROKHOVETS V K	81
TSOTSKHALISHVILI N V	59	VDOVIN V A	47	WOLF L	73	YEROKHIN A V	82
TSURKAN A YE	87	VEDENEYEV A A	16	Y		YESEPOV I B	27
TSVETKOV A D	6	VEDENEYEV V I	65			YES'KOV N A	1
TSVETKOV V A	86	VELCULESCU V G	27,88			YESMAN A K	52
TSVYK R SH	41,69	VELIKANOV A G	8			YEVDOKHINOV A A	31
TSYBIN A S	84	VELIKIKH V S	88			YEVSTAF'YEV V V	41
TUCHIN V V	66	VERBOVETSKIY A A	53	YAFAYEV N R	54	YUNDEV D N	22
TURKEVICH YU G	54	VERESHCHAGIN V I	21	YAKIMENKO M N	84	YURAS S F	71
TUROVSKAYA T S	88	VERETENNIKOV V V	47	YAKOBI YU A	15	YURSHIN B YA	64
TURUKHANO B G	52,54	VEREVKIN YU K	5	YAKOVLENKO S I	13,16	YURSHINA N I	64
TUZOVA S I	75	VERGUN I I	84	YAKOVLEV I M	21	YUR'YEV M S	9
TVERDOKHLEB P YE	51	VERLAN V I	87	YAKOVLEV V A	68,70	YURYSHIN N N	8,18
TVERSKOY M G	80	VERTIY A A	81	YAKUSHKIN I G	47	YUSHIN A S	35,37
TYABOTOV A YE	46	VESELA Z	7	YANSHCHIKOV V A	8	YUSHKO K B	26
TYAKHT V V	65	VESHCHIKOV A A	69,70	YANIK A A	15	Z	
TYUNINA YE S	91	VEYKO V P	90	YANKOVSKIY A A	72,79	ZABELIN S V	74
		VIKTOROV L V	78	YANKOVSKIY A YU	9	ZADOKHIN B S	86
		VINETSKIY V L	63	YANOVSKIY V V	80	ZAGORSKIY YA T	5
		VINOGRADOV B A	9	YANUSHKEVICH V A	90	ZAKHARCHENKO S V	47
UBAYTULLAYEV SH B	25	VINOGRADOV G K	82	YARMOLITSKIY V F	61	ZAKHAROV N A	30,32
URIN B H	10,11	VINOGRADOVA A A	6	YAROSHETSKIY I D	89	ZAKHAROV V M	48
USATYV A N	4	VIZHIN V V	66	YAROSLAVSKIY L P	57		
USHAKOV G V	47	VLADIMIROV V V	27				

ZAKHARYAEV M V	48
ZALESKAYA G A	84
ZANIN V V	40
ZAPESCHNEY I P	16
ZASAVITSKIY I I	4
ZASLAVSKIY V YA	20
ZASOVIN E A	23
ZASTROGIN YU F	24
ZATSEPA L F	71
ZAVOROTNYI V U	48
ZAYCHENKOVA YE B	81
ZAYTSEV I I	94
ZAYTSEV L M	67
ZAYTSEV S V	38
ZEGE E P	48
ZEL'DOVICH E YA	64, 70
ZELENOV L A	67, 73
ZELINSKIY I N	82
ZEMLYANOV A A	49
ZENSKOV K I	82
ZENCHENKO S A	36
ZENKIN V A	2
ZEYAKINA YE A	21
ZEYNALLY A KH	28
ZHARKOVA E A	22
ZHDANOV G S	88
ZHERZDEV A V	88
ZHEVNOVA S M	59
ZHIGLINSKIY A G	82
ZHILICH A G	30
ZHILIONIS A A	82
ZHUKOV A F	41
ZHUKOV G P	42
ZHUKOV N D	4
ZHURAVLEV A G	66
ZHURKOV S N	89
ZOLOTOV YE M	39
ZON B A	95
ZRAZHEVSKIY A YU	39
ZUBAREV I G	25
ZUBRILIN N G	23
ZUYEV V V	48
ZUYEV V YE	48, 49
ZVERKOV M V	4
ZVORYKIN V D	8, 27, 92

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